

Trees And The Construction Process...

Basic Concerns And How To Avoid Problems

d.

DISTRICT DEPARTMENT OF TRANSPORTATION

URBAN FORESTRY ADMINISTRATION

4901 Shepherd Parkway SW
Washington, DC 20032

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Introduction

WHY ARE TREES IMPORTANT?

Trees represent a significant investment for the District in time and money

- DDOT spends seven million dollars for annual upkeep and tree planting
- Actual dollar value of the District's street tree resource is estimated between 50-80 million dollars
- Trees can add 7 – 20 percent to the value of a home

Introduction, cont'd

Mayor Williams has prioritized tree establishment and maintenance in his efforts to revitalize the District

Trees are a common interest item that most residents care about and understand. When we, as government employees, show a similar interest in tree care, an enormous amount of goodwill is produced which is beneficial to the entire District government system.

What You Should Learn Today

Different types of tree damage

Consequences of tree damage

How to limit and eliminate tree damage

What to do if damage occurs

Construction guides and specifications

Different Types of Tree Damage

Above ground (shoot) versus below ground (root) damage

Shoot damage is usually obvious and visible

- Broken or stripped limbs
- Damaged/mangled bark and other wounds

Different Types of Tree Damage, cont'd

Root damage is less obvious, sometimes invisible, and usually more detrimental to tree health

- Compacted soil (not obvious, not visible)
- Torn roots from digging near the tree pit (visible, not always so obvious)

Consequences of Tree Damage

Root loss may cause a tree to become hazardous and unstable, causing it to fall with or without warning

If root or shoot damage is severe, the tree may die over time. Trees with damaged root systems may survive up to 7 years, after the street construction is completed, then die

Disgruntled residents may hold up job progress and demand a significant amount of staff time and resources to resolve a tree-related matter

How To Limit/Eliminate Tree Damage

Install all protection devices **BEFORE** the job begins
(red book spec 611.07, contract spec 51)

- Tree armoring to protect the trunks of the trees (if necessary)
- Tree fence around the planting box and/or along the continuous grass strip to protect the roots and limit damage

Demand that all protective devices are installed correctly

How To Limit/Eliminate Tree Damage, cont'd

Material storage must not occur within the tree box or within the base of the tree's critical root zone (CRZ).
(contract spec. 51.B.1 – see handout for CRZ)

Shut down jobsites with inadequate tree protection

WATER, WATER, WATER, AND... KEEP CUT ROOTS
MOIST!!!!!! (contract spec 51.C, red book spec 611.08)

What To Do If Damage Occurs

Call the **Urban Forestry Administration (UFA)** at 202-645 6140

Corrective cuts for root or shoot damage should be done by a Certified Arborist (red book spec. 611.07, 611.08)

Do not remove a tree unless inspected by a UFA representative.

Trees will be required as replacements (red book spec 611.07 and the Urban Forest Preservation Act of 2002)

WATER, WATER, WATER !!!!!



No Tree Protection / Unacceptable Storage Techniques (Before)

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Acceptable Tree Protection (After)

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No Tree Protection

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No Protection & Exaggerated Cut Into Rooting Area

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**Root Loss Volume Must Be
Minimized to Increase Chances of
Survivability**

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Adequate Trunk Protection, Non-Existent Root Protection



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**This Tree Should Have Been
Removed and Replaced - It Will
Not Survive**

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Avoidable Root Damage

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PROTECT THE TREE WITH WRAP, AND PROTECT THE BOX WITH FENCING

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**KEEP THE TREE BOXES
CLEAR, IT'S EASY TO DO**

Summary

- Tree Protection is a critical element of any street construction activity
- Trees will not be protected unless the contractors are made aware of the issue
- Tree protection is usually not difficult or costly
- Protecting trees during construction ensures long term tree health, saves money in the long run, and builds trust among the District's residents

For More Information
Call the Urban Forestry
Administration

202-645 6140